

From glowbugs@theporch.com Wed Nov 27 10:31:50 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1])
by uro.theporch.com (8.8.4/AUX-3.1.1)
with SMTP id KAA09085;
Wed, 27 Nov 1996 10:22:41 -0600 (CST)
Date: Wed, 27 Nov 1996 10:22:41 -0600 (CST)
Posted-Date: Wed, 27 Nov 1996 10:22:41 -0600 (CST)
Received-Date: Wed, 27 Nov 1996 10:22:41 -0600 (CST)
Message-Id: <199611271622.KAA09085@uro.theporch.com>
Errors-To: conard@tntech.campus.mci.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 365
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 365

Topics covered in this issue include:

- 1) BA/GB Net Fonzies (Wat a fine bunch o' folks!)
by rdkeys@csemail.cropsci.ncsu.edu
- 2) BA/GB net
by Richard Wilkerson <richqrp@pacbell.net>
- 3) Re: BA/GB net
by rdkeys@csemail.cropsci.ncsu.edu
- 4) Handbooks and Stuff
by Glenn Finerman <GFINDER@nms.com>
- 5) Re: BA/GB Net fun
by "Brian Carling" <bry@mail1.mnsinc.com>
- 6) Re: surplus crystal question
by "Brian Carling" <bry@mail1.mnsinc.com>
- 7) Re: BA/GB Net fun
by Doug <doug@sunrise.alpinet.net>
- 8) Re: BA/GB Net fun
by Gordon Gekko <gekko@nwlink.com>
- 9) Found why I'm not loaded, I mean loading...
by Gordon Gekko <gekko@nwlink.com>
- 10) She's done! And a runnin'
by Gordon Gekko <gekko@nwlink.com>
- 11) Re: surplus crystal question
by Bob Roehrig <broehrig@admin.aurora.edu>

- 12) Re: BA/GB Net fun
by "Brian Carling" <bry@mail1.mnsinc.com>
13) Re: She's done! And a runnin'
by mjsilva@ix.netcom.com (michael silva)
14) Re: Found why I'm not loaded, I mean loading...
by rdkeys@csemail.cropsci.ncsu.edu

Date: Tue, 26 Nov 1996 14:05:20 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: glowbugs@theporch.com, boatanchors@theporch.com
Cc: rdkeys@csemail.cropsci.ncsu.edu ()
Subject: BA/GB Net Funnies (Wat a fine bunch o' folks!)
Message-ID: <9611261905.AA104866@csemail.cropsci.ncsu.edu>

....as T.O.M. once reminisced to the Young Squirt, in a Tirade and Epistle
o' de first water.....

Well, folks, I been a' thinkin' wid me grey matters (an' that be some
scarce commodity, 'ere, ye knows), about a thing we is a'started 'ere,
what seems to have caught on, and brings a fine smile to me brow.
After some almost two years o' beatin' me gums (wats left o' them thar
chopper holdin' thingies), we has arrived at a rite de passage.

It seems that this 'ere BA/GB Net thingie, has a'finally caught on!
Weuns has arrived!

Over de past several weeks, there has been a most fine and goodly crewe
aboard the ol' BA/GB watch, burnin' them thar holes wats befits de ether.
Wat has been most warmly received, is the right fine cammaraderie an'
most well mannered sort o' operation on de QRG. The philosophie (if me
can use one o' them thar 25 cent sized words) has always been ta makes
the watch a somewhat structured, but mostly round-table discussion group
with rarely de need fer a whip crackin' head honcho nc type feller ta
run de show. That way, folks can a'come an' a'go as they sees fit.
If nary a handful shows up on watch, then, it be fine, as it were, ta just
pass the key along betweenst chops, an' mebbie even rattle some QSK or
QRQ if the chops be amenable (after all, wat musick ta de ears it be ta
'ears a fine Hartley, or a fine Breadboardus glowtubeii, or a Stormin'
Viking, or a Feisty TCS chattin' betweenst themselves, at speed).
If de Herd arives on watch, then whomever has the biggest signal might
run some order an' pass a directed key along, or QRS to one o' them thar
rusty fellers wats still a tad timid on de ol' straight sendin' iron (hey,
all o' us been timid a time or two when shakin' loose the brass monkey,
an' oilin up de ol joints, an' talcin' up de fingertips).

I haves been most utterly amazed at wats happened on de ol' BA/GB QRG,

wid fellers arrivin' on watch at 0100Z an' fellers still hangin' in there a'proppin' up de ol' glass elbow even after 0600Z. Wow! A fine and goodly crewe it is!

I wouldst suggest, as it be, that we try ta keeps the group somewhat in the general vicinity o' de chosen QRG o' 3579R545 +- R500 khz or so, cuz we can't rightly compete wid W1AW, and we shouldn't infringe too highly upon de traffic handlers down just below us on 3577.5 or so. After all, QTC is important to our brethren, an' mebbies methinks it might even be fun ta passes some QTC betweenst our fine crewe, from time ta time, fer the practical art and craft it might foster.

When it has all a'been said an' done, I must, with all due graces, doffs me bowler an' submits to ye, ``well done thar fellers an lassies'', ``ye has, indeed, a'started a fine and warm BA/GB tradition on the QRG, an' can rightly be a'proud o' the crewe on watch''.

Haves ye a fine an warm Turkey Day, keeps ye yer bottles a'glowin' brightly, yer tin cans atopps yer noggins, an' yer keys a'ready at the fore.....

73/ZUT DE NA4G/Bob UP

Date: Tue, 26 Nov 1996 10:14:02 -0800
From: Richard Wilkerson <richqrp@pacbell.net>
To: glowbugs@theporch.com
Subject: BA/GB net
Message-ID: <329B336A.361@pacbell.net>

I've been trying, but I guess my 50 watts is just not enough to get thourgh. I have heard quite a few signals on 3579 KC. But just cant get in. Hope things change so I can say hello on the band..73's rich

--

Rich Wilkerson, WD6FDD, Santee,Ca.
NorCal, ARCI, ARS, QRP-L & E.C.R.A.

Date: Tue, 26 Nov 1996 15:41:49 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: richqrp@pacbell.net
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com,
Subject: Re: BA/GB net
Message-ID: <9611262041.AA104912@csemail.cropsci.ncsu.edu>

> I've been trying, but I guess my 50 watts is just not enough to get
> thorough. I have heard quite a few signals on 3579 KC. But just cant get
> in. Hope things change so I can say hello on the band...

Keep trying. Also, for the West Coasters, it is probably a good idea to try at 0400Z/0500Z/0600Z. The path will usually be better then. We have had Seattle, Washington check in, as well as several others out there, so it will work, but the band needs to be pretty quiet, like after W1AW and the traffic nets go to bed. It will get better the colder it gets, so, as winter gets into full swing, you can expect better results. Last year, even 160M was good, occasionally, in the transcontinental path, coast to coast. I keep hoping for the Arctic winds to blow, so we Southerners can get some of that highly elusive ``lesser quiet background'' mode, for a change, but that mode is a rare bird, mostly, it seems, down 'ere.....(:+\.\.....

73/ZUT DE NA4G/Bob UP

Date: Tue, 26 Nov 1996 15:45:38 -0500
From: Glenn Finerman <GFINER@nms.com>
To: glowbugs@theporch.com
Subject: Handbooks and Stuff
Message-ID: <s29b10c8.062@nms.com>

Just ordered some old ARRL Handbooks for my Glowbugs cookbook project from A.G. Tannenbaum's in PA. Mike was very helpful and he mentioned they had a whole bunch of parts that weren't listed on their Web page that would be of interest to glowbug and boatanchor folks who were restoring xmtrs and rcvrs. Large oil filed caps, mica transmitting caps, etc.. Sounds like a great source for those restoration and construction projects! Give em a call (standard disclaimer insert here)

A.G. Tannenbaums 215-540-8055

73.....Glenn N2BJG gfiner@nms.com

Date: Tue, 26 Nov 1996 13:01:22 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: GFINER@nms.com
Subject: Re: BA/GB Net fun

Message-ID: <199611262058.PAA07570@user2.mnsinc.com>

HEY! It's a reply from AF4K!

On 25 Nov 96, Glenn Finerman wrote:

> Even with all the QRM from the contest this past weekend the
> BA/GB gang on 3579 were banging the brass!
> My apologies to Bob NA4G, we started a QSO listening for
> check-in's on Saturday night, Bob went for a cup of joe
> and I proceeded to pop the fuse in the AC-4!, had to run out to rat
> shack on Sunday for a replacement. Worked some folks on Sunday night
> as well. I'm starting to tame that wild Vibroplex, Haven't used one
> in 20 years!... Down boy down!!
>
> 73.....Glenn N2BJG

Glenn, I bet there are quite a few Vibroplex bug fans that read this list. I used to have one of the Japanese imitation ones with the black base and clear plastic cover. It worked fairly well, and I learned to send with that "swing" that they are famous for. If a ham can master the "swing" and still be fully intelligible to the untrained ear, then bugs are awesomely good to use. Unfortunately MOST people that I hear using them, though few and far between these days, make an awful sounding racket that is full of errors and you can hardly tell the dits from the dahs!

Still, I wish I had one to wrestle with all over again, even though I enjoy the smooth electronic keyer here!

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Tue, 26 Nov 1996 13:21:29 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: morgan@speckle.ncsl.nist.gov
Subject: Re: surplus crystal question
Message-ID: <199611262118.QAA10062@user2.mnsinc.com>

HEY! It's a reply from AF4K!

On 25 Nov 96, Roy Morgan wrote:

> At 02:56 PM 11/22/96 -0600, you wrote:
> >

> >I have a device (A C.E. AP-2 which I believe is used with their
> >Sideband Slicer) which has a surplus xtal in it.
> ...CHANNEL 20 22.0 MC. On the side it says SC6918A. It is a
> FT-241A
> >holder. I know that this rock is down in the hundreds of KC
> >probably.
>
> Maybe not. I recently took one such FT-241A holder apart - inside
> was a plated, wire-mounted crystal about 0.3 inch on a side. I
> seemed to me that it was either really fundamental on the 22 mc
> frequency or a third overtone unit at about 7 mc.

Hmmm interesting! Yes, I think that that MAY be correct, because one
of Bal's old boatanchor rigs here has one of those rocks in the
socket of a chassis that is clearly designed to be a MOPA rig for
either 40 or 80 meter CW.

INTERESTING!

The rock says "24.4 MC" on it. Let's see, dividing by THREE, we get
8.1333333 MHz

Dividing by SEVEN gets us 3.485 MHz.

Should be most interesting to see what exactly this is. Maybe it was
an exciter for a VHF rig of his. I have no idea.
Perhaps the rocks inside some of these holders will yet yield some
surprises for us!

> Not likely in the hundreds of kc region.
>
> Check the details of your slicer operation - you may find that the
> filter is actually at 22 mc and the crystal unit is operating at its
> fundamental at that frequency.

>
>
> -- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899
> (National Institute of Standards and Technology, formerly NBS)
> 301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --
>
>

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Tue, 26 Nov 1996 21:32:41 -0700

From: Doug <doug@sunrise.alpinet.net>
To: glowbugs@theporch.com
Subject: Re: BA/GB Net fun
Message-ID: <329BC469.3598@alpinet.net>

I'm starting to tame that wild Vibroplex, Haven't used one

> > in 20 years!... Down boy down!!

> >

> > 73.....Glenn N2BJG

>

> Glenn, I bet there are quite a few Vibroplex bug fans that read this
> list.

>

>

>*****

> *** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *

> ** E-mail to: bry@mnsinc.com *

> *** See the great ham radio resources at: *

> ** <http://www.mnsinc.com/bry/> *

> *****

Hi Brian and others....just a comment. I've been using "Bugs" for
lotsa years. I have three now, two old ones from the Milwaukee RR,
and a brand new one I got from Mitch at Vibroplex a couple years back.
Yes, they take some practice and getting used to but I would'nt give
one back....not for a table full of keyers. I got an early start on
the Telegraph Testboard when I started for the Phone Co about 32 yrs
ago as an 18 yr old Ham with some electronic background. 'Turns out
the old-timers are still using the Pony Wire with Morse...so off I went.
A guy could work in the back of the building setting up DCT's for Tele-
type wires, and be talking to a testboardman in a distant City with a
bug setting on the keyshelf....fun.

My lucky day was the other day...came into a like new, Hickock Card-a-
Matic tube tester with a case full of cards. So, now I can really go
through the tubes in the shop...might even find the good ones and the
bad ones. 'What a find.

I've been heading for GB performance, got the R390A fixed and some parts
in for another one I'm putting together. It goes into the rack and will
be set up for morse with an antenna switch wired in...all I need is to
add whatever rig I've built and want to use.

Also, got the old ART-13 out of the dust...got a book in and now digging
up tubes...now for a power supply and to remember...just HOW did I do
the conversion for grid-block keying back in 1962?...Hmmmmmm. Anyone
got the info out there? I think it was in one of the Surplus Manuals..
or a CQ Mag...cant remember for sure.

I've been listening to the GB net at night...good signals here in MT...
great to hear all the neat little rigs on the air...keep up the great
work.

73

Doug Dunn, K7YD
Livingston, MT

Date: Tue, 26 Nov 1996 21:03:58 -0800 (PST)
From: Gordon Gekko <gekko@nwlink.com>
To: glowbugs@theporch.com
Subject: Re: BA/GB Net fun
Message-ID: <199611270503.VAA29864@montana.nwlink.com>

At 10:38 PM 11/26/96 -0600, you wrote:
>I'm starting to tame that wild Vibroplex, Haven't used one
>> > in 20 years!... Down boy down!!
>> >
>> > 73.....Glenn N2BJG
>>
>> Glenn, I bet there are quite a few Vibroplex bug fans that read this
>> list.
>>

My TenTec keyer died over the weekend, so I fired up my old
Vibroplex and 'tuned' 'er up and now I LOVE using it again!
Took a while to get used to the darn non-repeating dah's,
tho!

Dave WB7AWK
aka
Gordon Gekko

(Now back to trying to make that dang tank circuit load...)

Date: Tue, 26 Nov 1996 21:30:08 -0800 (PST)
From: Gordon Gekko <gekko@nwlink.com>
To: glowbugs@theporch.com
Subject: Found why I'm not loaded, I mean loading...
Message-ID: <199611270530.VAA04002@montana.nwlink.com>

Bob NA4G was RIGHT! and it was the ABSOLUTE LAST thing I checked.

You'll recall I am building another 6L6 Colpitts rig and could not for all the tubes in Russia get the plate to dip with my tank coil. I tried EVERYTHING. Absolutely nothing would make the thing load up, despite every bit of tinkering I would do.

WElllllllllll,

Bob, in his reply a couple days ago suggested the tank input variable could be bad. I thought 'naw, I checked it with my Micronta cap checker and it swept just fine. Well guess what? I changed it out and now I have RF happily swinging my SWR meter/dummy load. NOW I can go tinker with taps and caps to get the best tone and most output.

Just goes to show you what great advice abounds in our group. I honestly would not have ever thought to try that, since the silly thing meters out just fine. It just can't handle RF going through it.

Thanks, Bob (Aaargh, me matey!) and Conrad, and the other Bob WA4AOS, and Brian Carling, et al.

One other quickie - why would my plate current drop from 50ma to 20ma when I plug in the OB3/VR150? Never noticed that before.

73's

I'll let ya'll know when I get 'er resonated and on the air.

Dave WB7AWK
aka Gordon Gekko (LONGGGG story))

gekko@nwl link.com
kenwood@nwl link.com

Date: Tue, 26 Nov 1996 23:12:56 -0800 (PST)
From: Gordon Gekko <gekko@nwl link.com>
To: glowbugs@theporch.com
Subject: She's done! And a runnin'
Message-ID: <199611270712.XAA19194@montana.nwl link.com>

Well, I finally got my little 6V6 rig done and running on the air.

Interestingly, I have MUCH better results using overtone 3.5xx rocks than fundamental 40m rocks. Anyone know why?

I have a really nice 3.523 that doubles of course to 7.046, a darn nice spot for a QRP rig. This is by far my hottest rock, and gives me about 18 to 20 watts as indicated on my Kenwood AT-180 tuner/swr meter running into a 4BTV vertical.

All of my fundamental rocks gave the following:

| | |
|-------|---|
| 7.128 | 10 watts |
| 7.060 | 8 watts \$ chirpy |
| 7.175 | Out of my (General) band, not in a CW subband, and chirpy as can be. Who cares what the power is! |
| 7.075 | 9 watts clean, but not very good band placement |

Also, they all chirp to some degree. I anticipated this and brought the grid variable (3-30pf) cap out to the panel to tune the crystals for the best tone. I can get them to sound ok, but only the 3.523 sounds great, with that sweet tone we all love and not a hint of chirp.

Another interesting thing - maybe I'm missing something. When I install the OD3/VR150 in it's socket, ALL of the rocks become chirp free, but output levels drop to well below 5 watts. Even the 80m rock only gives me 5-6 watts. I don't quite want to be that much QRP. Why is this?

Last thing - does anyone have any 3.52x rocks they would like to trade for something I may have? I'd like to have 1 or 2 to choose from. I don't really even need that, except there is a slight off-freq QRM source at 7.046 that's just enough of a heterodyne that it's annoying. I don't plan on using the fundamentals in this rig (they do work fine in my DX40 and DX60, though). I have alot of trade stuff, if there is some kind of part you seek and have an extra 3.520 lying around, I'd love to work something out.

Anyway, this was a fun project. Thanks to Larry Szendrei for the chassis. This is by far the cutest little rig I have ever built, and I'd wager to say one of the neatest looking I've

ever seen thanks to the VERY art-deco steel chassis and case Larry provided. I will be shooting some pix in a few days and email them to anyone who wants to see it. I have paired it up with a J47 (J38 with base) and an old green key cord which looks very cool with the red highlights and knobs of the transmitter.

As soon as it's settled into the shack and tied into my TR system, I'll arrange scheds with anyone interested.

Thanks to all who helped with that stinky PI tank problem (bad input variable capacitor that reads good on a cap meter. Just doesn't like RF! Now lives at the dump. Bad cap. Naughty cap.)

73's fer now

Dave Ellison WB7AWK
gekko@nwlink.com
kenwood@nwlink.com

Next project? A receiver to match, of course!

Date: Wed, 27 Nov 1996 01:20:28 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Conard Murray <conard@tnitech.campus.mci.net>
Cc: Multiple recipients of list <glowbugs@theporch.com>
Subject: Re: surplus crystal question
Message-ID: <Pine.ULT.3.95.961127011419.27560D-1000000@admin.aurora.edu>

On Mon, 25 Nov 1996, Conard Murray wrote:

> Here is the scoop on the FT-241 rocks.
>
> For units marked for channels 0 thru 79 (20-27.9 MHz):
> Fcrystal = Fmarked/54
> Channel 20 or 22 MHz is on 407.407 KHz
>
> These were popular for building homebrew SSB/CW filters. I have used them as
> single xtal filters in simple HB receivers.

How right you are! Thanks a bunch. I new I'd seen a listing of them somewhere years ago. I fired up the C.E. Sideband Slicer tonight just to see what the channel 20 xtal oscillated at and it was 407.7KC in this particular circuit. So the AP-2 converter, in this case, could have been used for either a 48 or 862 KC receiver IF (Probably meant

to be used with a 50KC IF). I am assuming the slicer itself works at 455KC (Still haven't received the manual).

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Wed, 27 Nov 1996 03:42:24 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: Doug <doug@sunrise.alpinet.net>
Subject: Re: BA/GB Net fun
Message-ID: <199611271152.GAA25567@user2.mnsinc.com>

Doug, thanks for passing along your story. Must be great to have been involved in commercial telegraphy!

My grandmother was a morse telegrapher in Britain during WW1 or 2 - I don't know. We never talked about it while she was alive for some reason, and I only found out about it years later.

I had an ART-13 given to me at a hamfest about 15-20 years ago and I got it on the air with grid block keying also. I couldn't stand that clunky relay so I didn't use it keyed.

For the external grid block connections I just mounted two banana jacks in that pre-punched panel with all of the (approximately 3/8" diameter) holes in it! Worked great for me. Boy does that 813 do a good job! The hard part is keeping the 28 volt DC supply from over-heating, he he!

73 de AF4K

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Wed, 27 Nov 1996 06:49:37 -0800
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Re: She's done! And a runnin'
Message-ID: <199611271449.GAA03505@dfw-ix6.ix.netcom.com>

>Another interesting thing - maybe I'm missing something. When I
>install the OD3/VR150 in it's socket, ALL of the rocks become
>chirp free, but output levels drop to well below 5 watts. Even
>the 80m rock only gives me 5-6 watts. I don't quite want to
>be that much QRP.
>Why is this?

Screen-grid tubes are much more sensitive to their screen voltage than their plate voltage. If you think of the screen as being the plate of a triode you can look at any triode graph and see how much the plate current depends on plate (screen) voltage. Some screen-grid tubes also have graphs showing Ib vs Ec2 directly, making this relationship quite clear. Maybe you could try two 105v regulator tubes in series if you want more output.

73,
Mike, KK6GM

Date: Wed, 27 Nov 1996 12:11:33 -0500 (EST)
From: rdkeys@csemail.cropsci.ncsu.edu
To: gekko@nwlinc.com
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: Found why I'm not loaded, I mean loading...
Message-ID: <9611271711.AA105141@csemail.cropsci.ncsu.edu>

> Bob, in his reply a couple days ago suggested the tank input variable
> could be bad. I thought 'naw, I checked it with my Micronta cap checker
> and it swept just fine. Well guess what? I changed it out and now I
> have RF happily swinging my SWR meter/dummy load. NOW I can go
> tinker with taps and caps to get the best tone and most output.

Very important point! Often sillicapcheckers, regardless of whose make, will not load a capacitor with enough RF current to make it work in the same manner that a true plate circuit will. Thus, it will often check out fine, and be a dud in situ in the rig. I have run across about a dozen such caps over the years and don't use them in transmitters. They can often be used in receivers, though. Back when I was an unknowing pencil-necked-geek of a novice, I used to routinely lube all my capacitors for best operation (generally a good practice BUT...). That sometimes did not work, and what I found was lubing the bearings is GOOD --- lubing the RF contact surfaces is highly BAD. Such overly-zealously-lubed capacitors can be resurrected, quite often, by dipping in alcohol or acetone followed by alcohol to clean the RF contact surfaces, then correctly relubing the bearings ONLY. Sometimes, it

is the RF contact surfaces that are corroded or not pressuring together sufficiently. In that case, you have to clean off the corrosion and/or increase contact pressure. Increasing contact pressure is a VERY DELICATE operation, and if not correctly done, can ruin a capacitor. In the old days, where capacitors had coiled contact wires, the wires sometimes go bad and don't make proper connection. In that case, just make up a new coil spiral of about 2 turns of some flexible braiding such as old coax braid from small sizes of coax.

> Thanks, Bob (Aaargh, me matey!) and Conrad, and the other Bob WA4AOS,
> and Brian Carling, et al.

Yer most velkommen, and that is what one of the main functions of the list is --- to offer suggestions/help/hints/not-in-the-books-practicum, etc. Collectively, most of us have been there at some time or another and usually will have some reasonable, and sometimes some quite elegant and interesting solutions to such problems. I am continuously amazed at the ingenuity and practical knowledge the group has.....

> One other quickie - why would my plate current drop from 50ma to 20ma
> when I plug in the OB3/VR150? Never noticed that before.

You reduce the ``plate voltage'' of the ``triode'' section of the pentode electron coupled circuit, thus reducing drive and final output. The use of a VR tube to stabilize the oscillator ``subsection'' or ``triode section'' is quite common. It reduces pulling effects as voltages dip under keydown, by keeping the ``plate voltage'' of the ``triode section'' stable. The same thing can often be accomplished by using a full series resistor dropping string where the ``plate voltage'' of the ``triode section'' of the pentode tube is held stable by adding an additional resistance to ground, outside of the feedback circuit (isolated from it). Or, you can use a VR-tube, which is more elegant if the parts are around. Stability of that screen line is very important to reducing chirp. Chirp is most prevalent in a fundamental circuit and much less in harmonic circuits where you double or triple from the xtal frequency for output. In true electron coupled oscillators (Dow's circuit[s]) you have to carefully adjust the voltages and the divider networks to obtain best operation. When it is done, there is no need for VR-tube regulation. Most folks opt for the simple way out, by just sticking a VR tube there. (For details, c.f., Dow's original articles in Proc. IRE and 1932/3/4 QST [forget which issues offhand]).

73/ZUT DE NA4G/Bob UP

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